

REMARKS

In response to the Examiner's Office Action, Paper No./Mail Date 20070402, dated April 5, 2007, Applicants have carefully studied the references cited by the Examiner and the Examiner's comments relative thereto.

Claims 4, 10-13, and 15-18 have been amended.

Claims 1-18 remain in the application.

No new matter has been added.

Reconsideration of the application, as amended, is respectfully requested.

35 U.S.C. § 103(a)

The Examiner rejected Claims 1-18 as being obvious over Birckbichler et al. under 35 U.S.C. § 103(a).

The Examiner acknowledges a defect of the Birckbichler reference, namely the lack of a teaching of "a control signal... to inspect and identify out-of-parameter containers and to use the control systems to adjust the molding system assembly." To cure the defect, the Examiner asserts that "it would have been obvious to a person of ordinary skill in the art at the time of the invention to use well known control techniques, such as generating a control signal, to further define the method and apparatus taught by Birckbichler in order to efficiently form the desired finished containers" (para. 3 of the Office Action).

The Applicants traverse the rejection of Claims 1-18 because the Examiner has failed to make a *prima facie* case of obviousness. The Birckbichler reference does not teach or suggest all the limitations of the claims, nor has Examiner provided an explicit analysis to establish obviousness as required by *KSR Int'l Co. v. Teleflex Inc.* KSR Int'l Co. v. Teleflex Inc., 550 U.S. , 2007 WL 1237837 citing *In re Kahn*, 441 F. 3d 977, 988 (CA Fed. 2006) ("[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness").

The Applicants note that the Birckbichler reference was known and disclosed in the IDS. It is with the knowledge of the Birckbichler reference that the Applicants' filed an application for the present invention as an improvement to the methods and systems for controlling a container manufacturing system known in the art, including the invention

disclosed by the Birckbichler reference. The Birckbichler reference discloses a method and system for inspecting the wall thickness of blow-molded plastic containers directed to determining which molds or spindles of the blow-molder are producing containers wall thicknesses outside of an acceptable parameter (see Claim 1; col. 6, lines 36-40). To modify the spindles or molds to produce containers within the parameters, an operator must manually adjust the blow-molder or shut the blow-molder down for repair and further inspection (see col. 6, lines 38-46). The present invention is directed to a system and method for controlling a container manufacturing machine by adjusting the machine control to automatically change operation of the machine and adjust the quality of the containers produced.

Claim 1 of the present application recites:

An inspection and control system for monitoring the production of blow molded containers comprising:
a thickness monitor for generating a thickness signal representing an average wall thickness of a container produced by a container manufacturing machine; and
a system control connected to said thickness monitor and being responsive to said thickness signal for generating a control signal, said control signal adapted to be used by machine controls of the container manufacturing machine for adjusting operation of the container manufacturing machine based upon said average wall thickness.

The present application discloses a system and method for controlling a container manufacturing machine including a thickness monitor for determining the average wall thickness data of containers produced by the machine [see para. 0028]. The system then uses the average wall thickness data values to adjust the machine control to change operation of the machine and adjust the quality of the containers produced [see para. 0039]. The data generated for each container is fed to “the blow molding system controls as well as be used to alert the machine attendant to other corrective action which may need to be taken” through an automated method [see para. 0038]. The feedback control will adjust the system to obtain the required recommended process control functions. The automated feedback of the system of the invention meets the long felt needs for: better blow molding process monitoring; requiring less need for human labor and intervention with the process; less variation in the product containers; and lower incidents of poor quality containers produced by the blow molding apparatus. Also, the thickness and process data is continuously monitored to facilitate incremental feedback control as needed to produce containers having an acceptable wall thickness to meet the long felt needs described herein [see para. 0039].

The Birckbichler reference discloses a method and apparatus for inspecting blow-

molded plastic containers including a blow-molder having a plurality of molds and a plurality of associated spindles. In Birckbichler, data representative of light that is not absorbed by the container is passed to detectors 74, 76, 78 which convert the received light into a corresponding electrical signal which is delivered to a microprocessor 90 [see col. 4, lines 59-63]. The microprocessor 90 receives the electrical signal and effects a comparison of the thickness information contained within stored information regarding desired thickness and rejects the container if the thickness is outside the desired range [see col. 6, lines 3-10].

However, unlike the Applicants' invention, the Birckbichler apparatus produces a mere electrical signal without reference to what the electrical signal represents and is devoid of any mention of generating a signal indicative of an average wall thickness of each and every container. Further, as indicated by the Examiner, the Birckbichler reference is devoid of any mention of control systems that generate control signals for automated and incremental adjustment of the blow molding machine. The apparatus of Birckbichler monitors the particular molds and spindles that produce an undesired thickness so that an operator can monitor and manually adjust mold-related parameters such as blow-pressure or blow-rate to correct the problem or the operator might need to stop the blow-molder to replace or repair a portion of the mold [see col. 6, lines 36-44]. Accordingly, the manual monitoring and adjustment disclosed by Birckbichler teaches away from the Applicants' invention, and does not meet the long felt needs met by the Applicants' invention. The Applicants' invention includes a system control for generating a control signal adapted to be used by machine controls of a container manufacturing machines based on a signal indicative of the average wall thickness of a container that is generated by a thickness monitor [see Claim 1; para. 0028 and 0038]. Because process parameters are automatically adjusted by the control system during container production, the Applicants' invention facilitates better process control; less need for operator intervention in the process; less random variation in the containers; and lower number of incidents of poor quality containers being produced. Whereas, the apparatus disclosed in Birckbichler requires operator input and adjustment to militate against the production of poor quality containers.

Thus, it is submitted that Birckbichler fails to teach the Applicants' invention Applicants' invention and in fact teaches away from the Applicants' invention by requiring an operator to manually modify the apparatus to prevent the production of poor containers. Further, since there is no teaching or motivation to combine a system control for producing a control signal with the apparatus of Birckbichler to result in the claimed invention, it is submitted that Claim 1 is not obvious under 35 U.S.C. §103(a) over Birckbichler and is allowable.

Since Claim 1 is deemed allowable, Claims 2-8, which depend directly therefrom, are also allowable.

Claim 9 contains at least the same limitations as Claim 1. Accordingly, for the same reasons discussed above, Claim 9 is not obvious under 35 U.S.C. §103(a) over Birckbichler and is allowable.

Since Claim 9 is deemed allowable, Claims 10-13, which depend directly therefrom, are also allowable.

Claim 14 as amended contains at least the same limitations as Claim 1. Accordingly, for the same reasons discussed above, Claim 14 is not obvious under 35 U.S.C. §103(a) over Birckbichler and is allowable.

Since Claim 14 is deemed allowable, Claims 15-18, which depend directly or indirectly therefrom, are also allowable.

The other references cited by the Examiner, but not applied, have been studied and are not considered to be any more pertinent than the references relied upon by the Examiner.

It is submitted that the claims distinctly define the Applicants' invention and distinguish the same from the prior art. Reconsideration of the application, as amended, is respectfully requested. A formal Notice of Allowance is solicited.

While the Applicants' attorney has made a sincere effort to properly define Applicants' invention and to distinguish the same from the prior art, should the Examiner deem that other language would be more appropriate, it is requested that a telephone interview be had with the Applicants' attorney in a sincere effort to expedite the prosecution of the application.